AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
2. AMENDMENT/MODIFICATION NO. 226
3. EFFECTIVE DATE 08/13/2012
4. REQUISITION/PURCHASE REQ. NO.
5. PROJECT NO. (If applicable)
6. ISSUED BY
   Idaho Operations
   U.S. Department of Energy
   Idaho Operations
   1955 Fremont Avenue
   Idaho Falls ID 83415
   CODE 00701

7. ADMINISTERED BY (If other than Item 6)
   Idaho Operations
   U.S. Department of Energy
   Idaho Operations
   MS 1221
   Idaho Falls ID 83415
   CODE 00701

8. NAME AND ADDRESS OF CONTRACTOR (No., street, city, state and ZIP Code)
   CH2M W&F IDAHO LLC
   Attn: Michael U. Ebbesen
   151 NORTH RIDGE AVENUE
   SUITE 150
   IDAHO FALLS ID 83424039
   CODE 165527569

9. DATED (SEE ITEM 17)
   03/23/2005

10. MODIFICATION OF CONTRACT/ORDER NO.
   DE-AC07-05ID14516
   11A. MODIFICATION OF CONTRACT/ORDER NO.

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 11. The hour and date specified for receipt of offers is ☐ extended, ☐ not extended.
   Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing the
   items 9 and 16, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT
   THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.
   If by value of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes a reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) 03/23/2005

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACT/ORDER. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT

ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

☐ OTHER (Specify type of modification and authority)

☐ Clause I.51 52.242-2 Changes - Cost Reimbursement (AUG 1987) & Alt I (APR 1984)

☐ IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Separator by UCF section headings, including solicitation/contract subject matter where feasible)

Tax ID Number: 05-0607601
DUNS Number: 165527569

This modification provides a target cost and target fee adjustment for the directed changes to:

1. Exercise the ARP I D&D Option at the Radioactive Waste Management Complex (RWMC) Subsurface Disposal Area (SDA);

2. Exercise a portion of ARP VIII Option II to authorize the purchase of long lead procurement items; and,

3. Formalize the suspension of work and spending on the WL-102 tank sampling activity as directed by the Contracting Officer through an e-mail dated May 22, 2012.

4. Other B.5 changes.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as hereinafter changed, remains unchanged and in full force and effect.

☐ NAME AND TITLE OF SIGNER (Type or print)
   Michael D. Ebbesen, Sr. Vice President & CFO

☐ NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
   Maria M. Mitchell

☐ CONTRACTING OFFICER (Signature of person authorized to sign)

☐ DATE SIGNED 08/13/2012

☐ UNITED STATES OF AMERICA

☐ DATE SIGNED 08/13/2012

☐FORMANCE STANDARD FORM 30 (REV. 10/63)
   Prescribed by GSA
   FAR (48 CFR) 53.243
<table>
<thead>
<tr>
<th>ITEM NO. (A)</th>
<th>SUPPLIES/SERVICES (B)</th>
<th>QUANTITY (C)</th>
<th>UNIT (D)</th>
<th>UNIT PRICE (E)</th>
<th>AMOUNT (F)</th>
</tr>
</thead>
</table>
| Delivery Location Code: 00701  
Idaho Operations  
U.S. Department of Energy  
Idaho Operations  
1955 Fremont Avenue  
Idaho Falls ID 83415 US  
FOB: Destination  
Period of Performance: 03/23/2005 to 09/30/2012  
Change Item 00001 to read as follows (amount shown is the total amount): | | | | | |
| 00001 | IDAHO CLEANUP PROJECT AT THE INL | | | | 3,215,598,900.00 |
| Line item value is: $3,215,598,900.00 | | | | | |
| Incrementally Funded Amount: $2,791,368,764.98 | | | | | |
| Refer to the Continuation Pages incorporated as part of this modification. | | | | | |
| This modification includes a target cost and fee increase. The total target value is $3,215,598,900. This includes a target cost of $2,660,007,151, a target fee of $195,591,749, and $360,000,000 for the Defined Benefit Plan Funding. | | | | | |
This modification provides a target cost and target fee adjustment for the directed change to:

1. Exercise the ARP I D&D Option at the Radioactive Waste Management Complex (RWMC) Subsurface Disposal Area (SDA);
2. Exercise a portion of ARP VIII Option II to authorize the purchase of long lead procurement items; and,
3. Formalize the suspension of work and spending on the WL-102 tank sampling activity as directed by the Contracting Officer through an e-mail dated May 22, 2012.

The following B.5 and B.5.1 revisions are also included in this modification:

1. Revise work scope for B.5.1 (m) from Modification 189, dated August 31, 2011;
2. Revise B.5 items “mm” and “r” to adjust cost and fee to reflect actual cost incurred;
3. Adjust base fee for MFC-766 Demo Ready to reflect actual work performed due to directed change to suspend work on January 12, 2012; and,
4. Add new scope to perform the directed change to engineer and design analysis necessary to develop and complete a RCRA permit final design for the Sodium Treatment System (STS).

5. **Section B.3 Total Contract Target Cost, Fee, and Completion Date**, paragraph (a) is modified as follows:

   (a) The target cost of this contract is comprised of the following two (2) items:

   a. SBW project at $316,000,000, and
   b. Balance of the Idaho Clean-up Project (ICP) work is increased $1,158,890 from $2,342,848,261 to $2,344,007,151.

   The target fee for this contract is increased $85,294 from $195,506,455 to $195,591,749 (7.36% of target cost).

The total contract target cost and target fee are based on the contract completion date of September 30, 2012. (The total proposed contract Target Cost and Target Fee shall not exceed the funding limits specified in Section B.2 – Cleanup Funding, on either an annual or total basis.)

2. **Section C.3.1 Facilities Demolition** is modified to incorporate the following scope:

   **Section C.3.1.1.1 Accelerated Retrieval Project (ARP) I and VI**

   Option scope is definitized with this modification. (This priced option was included with Mod 208, dated March 19, 2012). The target cost is increased by $602,685 and the target fee is increased by $44,357.

   Option scope includes CWI completing the demolition or disposition of ARP I by September 30, 2012.
3. **Section C.3.4.2 Construction of Accelerated Retrieval Project (ARP) VIII Waste Exhumation Facility to Excavate – Pits 1 and 2 at the Radioactive Waste Management Complex (RWMC) Subsurface Disposal Area (SDA)**

Option II scope is partially definitized with this modification. (This priced option was included with Mod 204, dated February 3, 2012). The target cost is increased by $556,205 and the target fee is increased by $40,937.

Option II partial scope includes the procurement of long lead equipment which includes, Axis Cameras, Mikron Cameras, Lighting, Lighting UPS units, Electrical Gear, Inlet/Relief/Dampers, Hose Reels, and Shrouded Probes.

This scope of work, including the schedule, measures, and deliverables, must be completed by September 30, 2012.

4. **Section C.2.1 Facilities**

**Section C.2.1.1 Facility Demolition**

CWI is directed to suspend all work and spending on the WL-102 Tank sampling activity. The final RCRA closure of WL-102 will be part of the eventual D&D of the Processing Equipment Waste PEW facility. Target cost or target fee will not be adjusted due to this stoppage.

5. **Section B.5 and B.5.1 Items Not Included in Target Cost are modified as follows:**

**B.5.1(m) High Level Waste / WIR Determination White Paper & RCRA Closure Planning for NWCF and PEW/LEW&D** work scope is modified as follows:

*Previous Text:*
The RCRA closure scope will include the development, submittal and approval of two Hazardous Waste Management (HWMA)/RCRA closure plans for:
- Process Equipment Waste Evaporator and Liquid Effluent Treatment and Disposal (PEW and LET&D) system
- New Waste Calcining Facility system

*Revised Text:*
The RCRA closure scope will include the development, submittal and DEQ comment resolution of two Hazardous Waste Management (HWMA)/RCRA closure plans for:
- Process Equipment Waste Evaporator and Liquid Effluent Treatment and Disposal (PEW and LET&D) system
- New Waste Calcining Facility system

Cost or fee adjustment is not required for this change.

**B.5.1(j) MFC D&D (Phases 103) Modification 138** fee structure is modified as follows:
MFC-766 Demo Ready (includes Sodium Treatment) fee is changed from $800,000 to $400,000 due to the work being suspended.

**B.5 Activity (mm) – FY09 Shipment of cask (HLW calcine) from INTEC 1659 to MFC**

is modified as follows:

Cost and fee are modified to reflect actual costs incurred. Cost is reduced to $62,008 and fee is reduced to $4,284.

**B.5 Activity (r) – FY09 INL Remote Handled Waste Disposition Project (RWDP)**

is modified as follows:

FY 2009 cost and fee are modified to reflect actual costs incurred. Cost is reduced to $0.0 and fee is reduced to $0.0 due to this scope being moved to ARRA funding.

**B.5 Activity (tt) Sodium Treatment System (STS) Design**

is incorporated as follows:

This scope for FY 2012 includes the engineering and design analysis necessary to develop and complete a RCRA permit final design for the STS that supports preparations and submittal of a RCRA permit application in FY 2013. This scope is not to provide a final design that supports equipment procurement and construction activities. The STS will be located at MFC-799. CWI should recommend a treatment technology or technologies, to DOE that will replace the Alkali Metal and Ammonia (AMANDA) technology TES developed in the STS conceptual Design for treatment of the INL sodium/NaK wastes. The scope of work also includes revising the National Environmental Policy Act (NEPA) Supplement Analysis (SA) and the Safety Design Strategy (SDS) for the Sodium Processing Facility to incorporate the selected treatment approach/technology.

This modification covers the additional costs over and above the costs that were included in the Bridge proposal to support the AMANDA technology system, which are now being used to support this effort. The additional cost for this scope is $780,256 and fee of $40,947.

All other B.5 and B.5.1 items remain unchanged. The updated B.5 table (Attachment 1) and B.5.1 table (Attachment 2) are included with this modification.

6. **Administrative Changes:**

(a) Purpose of this change is to revise the Section numbering from H.40 to H.41.

SECTION H.40 – NNSA/EM STRATEGIC SOURCING PARTNERSHIP is changed to read SECTION H.41 – NNSA/EM STRATEGIC SOURCING PARTNERSHIP

(b) **H.1 PROJECT CONTROL SYSTEMS AND REPORTING REQUIREMENTS**

Section (c) Project Controls

Monthly Progress Reports are to be placed within the Environmental Management Portal.
Transmit all Monthly Progress Reports to ContractorMPR@hq.doe.gov.

7. **CONTRACTOR'S STATEMENT OF RELEASE:** In consideration of the modification agreed to herein as a complete equitable adjustment for the directed change related to Section C. Section C.3.1.1.1 Accelerated Retrieval Project (ARP) I and VI, Section C.3.4.2 Construction of Accelerated Retrieval Project (ARP) VIII Waste Exhumation Facility to Excavate – Pits 1 and 2 at the Radioactive Waste Management Complex (RWMC) Subsurface Disposal Area (SDA), and in accordance with contract Section I.81 52.243-2 Changes—Cost Reimbursement Alt I, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the proposal for adjustment. The total target price of the equitable adjustment is $1,244,184.